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ABSTRACT

An experimental study compared celebrity evaluations of a treatment group exposed to a celebrity endorsed prosocial message and a control group shown a picture of the celebrity. Subjects, 88 young adults (younger than 25 years) enrolled in an introductory communications class at a mid-size university in the northeastern United States, were randomly assigned to one of the groups. Both quantitative and qualitative data were collected in response to the celebrity endorser, Madonna, appearing in an AIDS-awareness video. Concept mapping, a multi-dimensional scaling procedure, was used to examine relationships between celebrity attributes and celebrity-message congruence. Results indicated no differences in celebrity evaluations between the two groups when traditional source-credibility scaled measures were used. However, qualitative data comparisons and concept analyses revealed variations in perceptions. Findings suggest that the concept mapping procedure demonstrates promise in assessing associations among receivers' perceptions. (Four tables and three figures of data are included. The text of the video message and the content analysis categories are attached. Contains 38 references.) (Author/RS)

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Using Concept Mapping to Go Beyond the Source Credibility Model in Assessing Celebrity-Message Congruence

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ABSTRACT

An experimental study compared celebrity evaluations of a treatment group exposed to a celebrity endorsed prosocial message and a control group shown a picture of the celebrity. Both quantitative and qualitative data were collected in response to the celebrity endorser, Madonna. Concept mapping, a multi-dimensional scaling procedure was used to examine relationships between celebrity attributes and celebrity-message congruence. No differences in celebrity evaluations were detected between the two groups when traditional source-credibility scaled measures were used. However, qualitative data comparisons and concept mapping analyses revealed variations in perceptions. Implications are discussed.

Source credibility
Celebrity endorsement
Message effects
Methodology

Using Concept Mapping to Go Beyond the Source Credibility Model in Assessing Celebrity-Message Congruence

Every day on television one can see the popular communication strategy of celebrity endorsement. This is exemplified in the publicly recognized figures of Candice Bergen pronouncing the benefits of Sprint, Lee Iacocca standing up for Chrysler, Mike Jordan slam-dunking for MacDonald's, or Nancy Kerrigan aerobicizing for Reebok, all in the space of a 15- or 30-second spot. With millions of dollars expended on these media advertising campaigns, McCracken's (1989) criticism of inadequate theory and an imperfect understanding of the endorsement process merits consideration. Toward this end, the present research study reexamines the basic assumptions and theoretical constructs underpinning the source-message effectiveness model of communication in the context of new challenges raised. It then utilizes concept mapping, a multi-dimensional scaling procedure to examine celebrity evaluations and to assess their impact on celebrity-message congruence.

The Traditional Source Models

Source models have focused on identifying key attributes of the source or message sender which make them persuasive communicators, that is, persons whose messages are agreed to and/or acted upon. Among these characteristics, expertness and trustworthiness of the source are two conditions under which the source has been shown to be effective (Hovland, Janis and Kelley,

1953; Hovland and Weis, 1951). Expertness characterizes the degree to which a source is considered competent (Whitehead, 1968), qualified (Berlo, Lemert and Mertz, 1969), experienced, knowledgeable, and skilled to make specific assertions (Ohanian, 1990). Trustworthiness describes the degree of confidence or acceptance receivers have in the sender to make specific assertions and assesses the source's honesty, sincerity, dependability and reliability (Ohanian, 1990, 1991). Expertness and trustworthiness comprise the source credibility dimension of communication and studies have shown that generally, credible sources are more effective communicators than non-credible sources (Maddux and Rogers, 1980; Mills and Harvey, 1972; Ohanian, 1991).

Attractiveness has also been found to be a persuasive attribute of the source. Under certain conditions, attractive models have been found to be more effective communicators (Baker and Churchill, 1977; Chaiken, 1979; Dion, Berscheid and Walster, 1972; Joseph, 1982; Kamins, 1990; McGuire, 1985; Solomon, Ashmore and Longo, 1992). Attractive communicators have been evaluated as having more socially desirable traits (Dion, Berscheid and Walster, 1972) and are perceived as more likable (Kahle and Homer, 1984; Mehta, 1990) and dynamic (Horai, Naccari and Fatoullah, 1974; Joseph, 1982; McGuire, 1985; Snyder and Rothbart, 1971)

The traditional paradigm consists of measuring the celebrity sources in persuasive messages on predetermined scales related to

source characteristics (often expertness and trustworthiness) and assessing their impact on the message. This model, however, has had limited success in predicting the influence of sources in persuasive messages. A variety of moderating variables have been identified. Among these, a major factor mediating the effectiveness of such messages is the congruence between s specific product/message and the respective celebrity.

Source-Message Congruence

Several authors have recognized the potential importance of source-product congruence. Friedman and Friedman (1979) proposed that celebrities would be most effective for a certain class of products: those related to high psychological or social risk, those involving elements of good taste and self image. Their research showed that the celebrity was rated believable, influenced product attitude favorably and induced trial only for the product of high social risk. The celebrity was less successful for products related to high financial or physical risk. From their in-depth analysis of 300 celebrity advertisements, Rockey and Greene (1979) concluded that celebrity appropriateness, defined as the natural linkage between the personality and the product, was the most important determinant of the advertisement's success.

The basic mechanism underpinning the models discussed so far seems to resemble classical conditioning in which words consistently associated with positive stimuli and their

corresponding emotional response will, through the pairing process, individually evoke the emotional response (Staats and Staats, 1958). In the source models, messages or products are systematically paired with sources of known or attributed qualities of expertness, trustworthiness and attractiveness. Through repeated linkage, the messages or products become associated or weighted with the source attribute and will evoke the emotional response of the given attribute.

However, in the real world, not all messages and/or products are without intrinsic attributes. For example, a health spa was associated with attributes of fitness and working out to get a great body while bath towel associations were described as "soft, gentle and clean," (Langmeyer and Walker, 1991a, p. 368). As a consequence, a match-up occurs when source attributes are perceived as consistent with the product or message attributes (Chew and Mehta, 1992; Kahle and Homer, 1984). The match-up hypothesis postulates that the message conveyed by the image of the celebrity and the message about the product or service should converge in effective ads. This is typified by the case of an attractive source endorsing a beauty product (Solomon et al., 1992).

Source-Message Incongruence.

When the source's attributes do not coincide with the known attributes of the product or service, incongruence results. According to Heider's (1946) balance theory which postulates that

unbalanced states produce tension and generate forces to restore balance, change will occur within the situation so that a balanced state is achieved. Mowen, Brown and Schulman (1979) proposed that one way to resolve the imbalance is for receivers to change their perceptions of the source or the product. Jacoby and Mazursky (1984) suggested that an averaging process takes place in which receivers evaluate the object with the less favorable image more highly while evaluating the object with the more favorable image less highly. Consequently, in order to modify the image of a celebrity or product, the movement towards congruence could be planned.

Contrary to the averaging hypothesis (Jacoby and Mazursky, 1984), recent evidence showed that a celebrity with a strong negative image experienced no evaluation increase after being paired with an organization with a positive image, although the image of the organization declined as predicted (Langmeyer and Shank, 1993). This indicated that in celebrity endorsements, the strength and nature of a source's attributes could affect the direction and nature of the endorsed entity's attributes.

Cultural Meaning Transfer

Source effectiveness and Unique Meanings

According to McCracken (1989), a celebrity's effectiveness as an endorser or spokesperson stems from the cultural meanings with which he/she is associated. These meanings arise from the roles celebrities play in their professional, public and personal

lives. The celebrity, possessing a unique, individualized and complex bundle of cultural meaning, may transfer that meaning to the product, and from the product, it may transfer to the consumer. McCracken (1989) suggests that celebrities are effective spokespersons to the degree that they are able to bring clear and unambiguous meanings to the product/service they endorse since only then can the transfer of meaning from celebrity to product/service be successfully made. Research exploring the steps involved in meaning transfer includes a recent study which found that a celebrity-endorsed product tended to share similar evaluations with its endorser (Langmeyer and Walker, 1991b). This study suggested that a product lacking a well defined image could develop one through celebrity endorsement and take on attributes of a celebrity which an advertiser would like to have associated with the product.

Acknowledging the need to include attributes which tap unique meanings, a few researchers have expanded the list of traditional source characteristics, going beyond the traditional credibility and attractiveness dimensions. In their qualitative analysis of attributes associated with Cher, Langmeyer and Walker (1991a) identified items which were uniquely Cher (e.g. health, independence, great body). This clearly demonstrated that celebrities have unique symbolic meanings which may not comprise the traditional source credibility attributes and which may need to be identified in order to more effectively apply the strategy of celebrity endorsement.

Degree versus kind of attribute

For the most part, researchers have attempted to select appropriate celebrities to endorse products or services using the traditional source models and the process of selecting a celebrity whose meanings are congruent with the product/service is clearly an important one. However, source models have not always been satisfactory in providing explanations for the ineffectiveness of "appropriately matched" celebrity-product pairs and in predicting success when celebrity and product were "inappropriately matched" (McCracken, 1989). McCracken faults the use of rating measures to scale a celebrity's perceived source characteristics regarding credibility, physical attractiveness, likability, trustworthiness and expertness. He argues that these methods, based on the traditional source model, cannot allow discrimination between celebrities in any useful way. It is possible that two or more celebrities may be rated similarly on scales such as those previously listed but this "sameness masks profound and thoroughgoing differences." (p. 312). He maintains that it is not enough to know the *degrees* of attractiveness or credibility, the *kinds* of attractiveness and credibility must also be known. He emphasizes that the meanings intrinsic to and conveyed by the celebrity must be measured and how these meanings serve the endorsement process better understood. Langmeyer and Walker (1991b) utilized 25 semantic differential pairs ranging from "exotic/ordinary" to "wide-appeal/limited appeal" to evaluate Madonna and Christie Brinkley.

Although the characteristics were originally derived from open ended responses and attempted to tap cultural meanings, it is possible that their incorporation into a finite number of scales could again conceal differences and nuances of meaning.

Source-Message Effectiveness Reexamined

Since the evidence of source-message appropriateness or congruence is systematic and cumulative (Chew and Mehta, 1992; Chew, Mehta and Oldfather, 1993; Kahle and Homer, 1984; Rockey and Greene, 1979), source-message congruence appears to be a prerequisite of source effectiveness. In the absence of a well defined product image, the endorser's attributes would be conferred on the product -- a process akin to a vacuum being filled.

The selection of a source whose image is incongruent with that of the endorsed entity represents a strategy employed to benefit from the movement towards congruence. This would work in either direction -- modify the source's image or that of the product/service. The result of that equation would be influenced by the magnitude and kinds of attributes associated with the source which may be positive and/or negative.

McCracken (1989) has expanded the range of traditional source credibility attributes to include a source's unique meanings. This is an important step in further explicating source-message congruence as opposed to solely explicating the transfer of cultural meaning. For example, former tennis

champion Jimmy Connors' attribute as an old player by tennis championship standards (who made a comeback at Wimbledon in 1992) was probably a unique meaning which gave him credibility and congruence to endorse Nuprin as a remedy for backpain and muscle sprain. The transfer of cultural meaning as McCracken hypothesized would hold mainly under conditions where product brands are differentiated by image. Fragrance would be a case in point as illustrated by Elizabeth Taylor's "Passion" and Linda Evan's "Forever Krystle."

The inadequacy of source models to predict the success of an incongruent source-message or failure of a congruent one could in part be attributed to the limited attributes of the traditional source models as McCracken argues. In addition, methodological flaws in testing (e.g. hypothetical scenarios versus actual exposures or field experiments, lack of uniform measures and instruments, inaccurate target consumers, inappropriate evaluation criteria, history and other artifacts) could also lead to spurious results.

Finally, in view of the increasing fragmentation and segmentation of audiences via age, gender, education, income, occupation, lifestyle and other demographic, psychographic or behavioral or other grouping variables, audience characteristics could mediate source-message congruence, other source-message dynamics and ultimately a source's and/or message's communication effectiveness.

A New Approach with Concept Mapping

As a response to McCracken's call to seek a source's unique meanings beyond the traditional source credibility attributes and to devise ways to measure them without being limited to uniform scaling procedures, the present research study proposes the use of concept mapping to identify, quantify and relate a source's unique meanings with communication effectiveness. Evaluations of message and celebrity endorsements would also be tapped and analyzed. Concept mapping is a multidimensional scaling procedure recently developed (Miller, 1991) for the specific purpose of analyzing natural language text (e.g. open-ended interviews, news reports) via computer. Unlike other computerized content analytic programs which require subjects' evaluation of similarities among terms, concept mapping derives spatial representations based solely on subjects' open-ended answers and the co-occurrence of terms. In addition to quantifying response frequencies, it generates a matrix of co-occurrence cosine coefficients based on the terms used by subjects. The formula for the co-occurrence cosine matrix is as follows where *A* and *B* represent the respective terms (Salton, 1982).

$$COS\text{-}\frac{\sum(AB)}{\sqrt{(\sum A^2)(\sum B^2)}}$$

Concept mapping appears particularly relevant for the task of quantifying and relating a source's unique meanings to products, message appeal and communication effectiveness. It

permits a closer understanding of the type, range and prevalence of unique meanings associated with a celebrity or unique evaluations of message appeal and the celebrity endorsement process. When the first three principal components of the co-occurrence cosine matrix are extracted, standardized and mapped spatially, the size of the "concept" is proportional to its frequency and the distance(s) between "concepts" represent(s) the degree(s) to which they co-occur. Consequently, concepts appearing close to each other could be said to represent a cluster, factor or dimension and are related through co-occurrence.

Concept mapping has been used to map the different ways in which six newspapers covered the Supreme Court confirmation hearings of Clarence Thomas (Miller, 1991), the pre election perceptions of Presidential candidates among young adults (Chew and Miller, 1992), celebrity-product congruence (Chew and Mehta, 1992; Chew, Mehta and Oldfather, 1993) and the influence of celebrity-message dynamics on communication effectiveness (Chew, Mehta and Oldfather, 1994). In these studies, concept mapping showed the clustering of co-occurring unique attributes and objects and through spatial plots demonstrated the distance (closeness or separateness) of specific objects from critical attributes.

Objectives of the Study

Previous research (Chew, Mehta and Oldfather, 1993)

demonstrated the heuristic use of quantitative source credibility and attractiveness measures in combination with qualitatively derived open-ended data to gain a more comprehensive picture of the endorsement process. It found that a celebrity's evaluations diminished rather than increased after exposure to the treatment messages, illustrating the effect of testing an actual ad execution versus a hypothetical scenario. No differences existed in quantitatively-oriented source credibility evaluations between subjects exposed to two identical ads with a different final message. The present research compared celebrity evaluations of a treatment versus a control group in order to test whether concept mapping can reveal differences between celebrity-message congruence evaluations in relation to traditional quantitative scaled measurement analysis. In line with using both quantitatively- and qualitatively- derived data, the present study proposes two objectives: (1) to identify and analyze whether and how message association influences celebrity evaluations; (2) to examine whether and how celebrity evaluations influence message congruence.

Method

Subjects

An experiment consisting of two groups (a control group and a treatment group) was conducted in Spring 1994. A total of 89 young adults enrolled in an introductory communications class at a mid-size university in the Northeast participated in the study.

Subjects were randomly assigned to one of the groups. In order to keep the sample focused on young adults, data from subjects aged 25 or older were excluded. This yielded a total of 88 subjects (50% male and 50% female) with usable data and the two groups were balanced in gender, age and class standing.

Selection of celebrity

An effort was made to choose a celebrity who would be highly visible and recognizable to the subject pool. Madonna seemed a natural choice as she was one of the leading pop stars in the world. According to a 1992 Us magazine reader poll, she was voted the top "entertainer of the year" as well as the "most overexposed actress." She was one of Glamour Magazine's 1990 choices as "Woman of the Year" and is considered one the highest paid female entertainers in the U.S. reportedly earning about $100 million from 1986-90. She has been described as "crass...provocative...notorious...ruthless...in charge and very much in vogue." (Maclean's 1990, p. 48-50).

Previous research has found that she tended towards being "outlandish," "unnatural," "intense," and "nasty" (Langmeyer and Walker, 1991a) and has been rated as qualified to endorse designer jeans (Ohanian, 1990; 1991). A recent study found that her strong negative image and poor reputation "damaged" the image of a charitable organization to which she was hypothetically linked as a celebrity endorser (Langmeyer and Shank, 1993). In actuality, Madonna has not endorsed any products in the U.S.

since the Pepsi ad controversy and has been a spokesperson for only the "Rock the Vote" campaign and the AIDS activist group, Musicians for Social Responsibility.

Design

Each group completed a ten-minute self administered questionnaire after exposure to either a public service announcement (PSA) or still picture of Madonna excerpted from the PSA. One treatment group saw Madonna's "AIDS Awareness" television spot, a 30-second rock video public service announcement featuring a dark-haired Madonna walking among a group of students and addressing the camera audience directly about using condoms to prevent the spread of AIDS.

In a previous study, condom use was most frequently identified by a similar group of young adults as the product most appropriate for Madonna to endorse (Chew, Mehta and Oldfather, 1993). AIDS awareness and safe sex was the third most mentioned product/message. This research proposed to assess whether Madonna was indeed an appropriate spokesperson for AIDS awareness and condom use, and whether evaluations of Madonna would be enhanced by association with the prosocial message.
Appendix A includes a text of the treatment message. Data were compared for differences between the two groups using the two methodological approaches of standard quantitative analyses and concept mapping.

Procedure

Both groups were informed that this study was about thoughts and feelings people have when they see different types of ads and messages. After message exposure subjects were asked to name the featured woman and list where they had seen her. Eighty-three subjects recognized Madonna and their qualitative evaluations were further analyzed.

Quantitative measures

Subjects were asked to assess the woman's source credibility attributes of believability, trustworthiness, attractiveness, likability and expertness on a unipolar scale of 1 to 9. Similarly on a 1 to 9 scale, subjects rated products/messages for which Madonna would be considered qualified as an expert to endorse. These items were condom use, AIDS awareness and designer jeans which were also evaluated for celebrity-message congruence. In order to minimize response bias, some scaled items were systematically inverted so that 9 did not always correspond to the high response. These were later recoded so that 1 was a 'low' and 9 was a 'high' response or rating.

Qualitative Measures

In an open-ended question, subjects were asked to list three attributes which best characterized the celebrity. Up to three most appealing attributes. The open-ended question was content analyzed and grouped by category. Celebrity attributes were

coded into 12 groups using the concept mapping program. In order to better understand the characterizations or symbolic meanings of Madonna from the perspective of young adults, youth jargon (e.g. "delicious") was interpreted by a research assistant close in age to the subjects. Appendix B reports the content analysis categories developed for Madonna's attributes.

After the open-ended data were entered and processed in a specific format required by VBPRO, a computer program for concept mapping (Miller, 1991), VBPRO coded the data according to the above coding schemes and provided frequency distributions. In addition, it produced standardized principal components of the co-occurrence cosine matrix of the attributes and other relevant variables. These relationship clusters were profiled by mapping the resultant standardized scores three-dimensionally using the bubble-chart facility in Stanford Graphics (1992).

Statistical Analysis

To explore the first objective of analyzing how message association influences celebrity evaluations, several procedures were performed. Using quantitative measures, mean rating scores for the different source attributes and source-message congruence were calculated and compared among the two groups using t-test analyses. Multivariate analysis of variance for repeated measures was used to compare source-message congruence evaluations for the different product/messages. For the qualitative measures, frequency percentages of unique attributes

for Madonna were compared between the two groups. Concept mapping was performed to examine the relationship between celebrity attributes associated with the control or treatment message. A concept map of the standardized principal components of the co-occurrence cosine matrix of the terms (a) Madonna's unique attributes associated with each (b) treatment or control group was produced to assess what and how these clustered together.

The second objective was examined by comparing the celebrity evaluations of the two message groups in relation to whether or not subjects assessed Madonna to be an appropriate match for the AIDS awareness message via concept mapping. Subjects who assessed Madonna to be a good match for this message were defined as rating her 6 or higher on the 1 to 9 scale. The group comprised 49.1% of treatment group and 50.9% of the control group and evaluations did not differ significantly between the groups. These attributes were concept mapped with message exposure and source-message congruence. The resulting clusters were analyzed.

Results

Source Credibility Attributes

Table 1 shows that both the treatment and control groups generally scored Madonna similarly on all the source credibility attributes (believable, attractive, trustworthy and expertness). "Attractive" was the highest rated attribute ($\underline{M}$=5.97) with "trustworthy" the lowest ($\underline{M}$=4.13).

Insert Table 1 about here

Unique Attributes and Treatment Group

Table 2 displays the 12 unique attributes associated with Madonna ranging from "daring/outspoken," "sexy" to "smart and rich" and "beautiful." Attributes appeared to vary between the treatment groups. The treatment group more frequently mentioned attributes categorized as "slut" (30.5% vs 13.2%) while the other group more often thought of Madonna as "smart and rich" (20.2% vs 3.1%). Attributes which both treatment and control groups associated equally with Madonna were "talent/artist" (17.6% vs 22.8%), and "daring/outspoken" (14.5% vs 14.0%).

Insert Table 2 about here

Figure 1 displays the clusters of attributes associated with Madonna, message version and celebrity attributes which have been concept mapped using the standardized principal components of co-occurrence cosine coefficients. (Appendix C lists the standardized principal components.) The attributes "sexy" and "liberal" appeared to clustered more closely to the treatment group of subjects who saw the AIDS awareness message. Control group subjects seemed to cluster near the attributes of "smart and rich" and "powerful." While the treatment group seemed closer to "slut," "crazy" and "attractive," the control group was closer to the attributes "talent/artist" and "controversial."

Insert Figure 1 about here

Source-Message Congruence

As Table 3 shows, subjects generally rated AIDS awareness (M=5.61) highest, followed by condom use (M=5.37) and designer jeans (M=5.10) as products appropriate for Madonna to endorse. Although these evaluations were not significantly different, they reinforced previous research which suggested that Madonna would be appropriate to endorse condoms and AIDS awareness. Overall, scores were in the middle range. There were significant differences between the congruent and incongruent group ratings for Condom use and AIDS awareness (See Table 3).

Insert Table 3 about here

Celebrity Attributes and Celebrity-Message Congruence

Table 4 displays the celebrity attributes as they co-occur with the groups which rated Madonna as appropriate (match) or inappropriate (not match) for the AIDS awareness message. The match group more frequently mentioned attributes categorized as "talented" (21.9% vs 16.7%) and "daring/outspoken" (18.7% vs 6.7%) while the other group more often thought of Madonna as a "slut" (28.9%). Attributes which both groups associated equally with Madonna were "smart and rich," "controversial" and "sexy". Figure 2 displays clusters of celebrity attributes compared by celebrity-message congruence (match/not match). Congruence seemed to cluster around the attributes, "daring/outspoken" and

"controversial." Hovering about the incongruence cluster are the appeal attributes "slut" and "obnoxious." The attribute "talent/artist" seemed to be closer to celebrity-message congruence than incongruence.

Insert Table 4 and Figure 2 about here

Message Association, Celebrity Attributes and Celebrity-Message Congruence

Figure 3 displays the unique celebrity attributes in relation to the message group and celebrity-message congruence evaluation of the AIDS awareness message. Attributes appeared to line up between between the treatment and control groups. The concept map shows that again, "sexy" clustered closer to the treatment group while "smart and rich" hovered around the control group. Both groups appeared to be equidistant from the congruent and incongruent clusters indicating that both groups evaluated Madonna to be similarly appropriate for the AIDS message.

Insert Figure 3 about here

When results from the two analytic approaches were compared, concept mapping's clustering of naturally solicited celebrity attributes provided a deeper, complex and more comprehensive picture of celebrity-message congruence. In contrast, the standard quantitative analyses showed that the two treatment groups did not differ in any of the source credibility evaluation items. Qualitative analyses and the concept mapping approach

demonstrated subtle differences in the perceptions of source attributes as well as the relationship between source and message in terms of celebrity-message congruence.

Discussion

In general, the use of unique message and source-message attributes provided additional insights into the celebrity endorsement process because of its richer and wider data base. A range of unique source and message attributes was tapped through qualitative approaches and a new analytic procedure, concept mapping, used to quantify and link these with source-message congruence. Standard quantitative and qualitative analyses and concept mapping yielded data which were used complementarily to describe and explicate the celebrity endorsement process. The latter data were used in conjunction with standard quantitative data such as source credibility of treatment group to more fully map out a deeper, complex, and more comprehensive picture of source-message congruence.

The process of mapping unique attributes in relation to the message permitted a closer look at the complexity of source dimensions. Quantitative analysis of qualitatively obtained data, followed by concept mapping of attributes and products associated with Madonna, provided new and more information previously unavailable. For example, although the standard content analysis frequency tabulations showed that "talented" and "daring/outspoken" were the most mentioned celebrity attributes

by persons who evaluated Madonna as an appropriate AIDS awareness spokesperson, little else was available in terms of reasons why. The concept mapping procedure was able to go a step further by clustering these attributes with congruence according to the frequency of their co-occurrence. Thus, the procedure demonstrated promise in assessing associations among receivers' perceptions.

Subjects who perceived Madonna as "daring/outspoken" and/or "controversial" were more likely to assess Madonna as an appropriate spokesperson for the AIDS awareness message. Ironically, this tended to be more associated with not seeing Madonna endorsing the AIDS message than seeing her in one. The tendency for subjects who were exposed to Madonna's AIDS awareness message was to think of her as "sexy" and a "slut," and not appropriate as a spokesperson for the message. In contrast, the subjects who saw a still picture of Madonna were more likely to evaluate Madonna as both "talented" and "smart and rich" and slightly closer to being an appropriate AIDS awareness spokesperson. This suggests the possibility that treatment subjects evaluated Madonna as "sexy" and a "slut" because she was talking about a sexually transmitted disease and condom use and that message content may prime subject evaluations. In addition, a result of being associated with the AIDS awareness message was that Madonna was evaluated a little more negatively than if she had not been associated with the message. The implication for media practitioners is that celebrity publicists should be aware

that meanings from a message endorsed by the celebrity could transfer from the message to the celebrity and that they should ensure that these message meanings are consistent with rather than at odds with the celebrity's cultural meaning.

The heuristic of examining unique source-message dynamics and the varying extent of dimensions mentioned by the two groups served to underscore McCracken's (1989) imperative to delineate the kinds and degrees of source as well as message characteristics. The use of both quantitative and qualitative approaches to analyzing source-product congruence has been productive in gaining a more comprehensive picture of the endorsement process. This has led to the utilization of constructs underlying source models, source-message congruence, cultural meaning transfer and concept mapping in further delineating the complexity of celebrities' unique attributes and how these cluster with message appeal characteristics and other source-message dynamics. Future research is needed to determine whether these clusters hold for other messages as well as for wider populations of young adults as the study sample comprised a homogenous college student population. Another limitation of this research was that the sample was limited in size. Finally, more research should focus on a variety of celebrities, products and message executions so that source-message congruence and effective celebrity endorsement can be more strategically tapped.

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TABLE 1

Mean Evaluations and T-Test Analysis of Traditional Source Credibility Attributes by Group

Attribute Evaluations[a] n=	Control (S.D.) (44)	Treatment (S.D.) (44)	t
Believable	5.02 (1.69)	4.73 (2.50)	-.65
Attractive	5.98 (1.89)	5.95 (2.11)	-.05
Trustworthy	4.27 (1.45)	4.00 (2.17)	-.69
Likable	4.70 (1.89)	5.23 (1.95)	1.28
Expertness/ Qualified to endorse:			
Condom use	5.93 (2.15)	4.81 (3.22)	-1.88
AIDS awareness	6.09 (2.05)	5.14 (2.69)	-1.86
Designer jeans	4.89 (2.21)	5.32 (2.47)	.88

[a] Evaluations were based on scale of 1 to 9 where 1=not at all and 9=very much.

TABLE 2.

Percent* Frequency of Unique Attributes Associated with Madonna by Group

Attributes n=	Control (114) %	Treatment (131) %
Slut	13.2	30.5
Talent/Artist	22.8	17.6
Daring/Outspoken	14.0	14.5
Sexy	6.1	9.2
Controversial	9.6	9.2
Attractive	4.4	6.9
Smart & Rich	20.2	3.1
Obnoxious	2.6	2.3
Attention seeker	0.9	2.3
Wild/Crazy	0.0	2.3
Liberal	1.8	1.5
Powerful	4.4	0.8

* Percentages sum to 100%. They are ranked by responses in the treatment message group. The total number of attributes mentioned comprise the base for each group.

TABLE 3

Mean Evaluations and T-Test Analysis for Source-Message Congruence by Group

Source-Message Evaluations* n=	Congruent (S.D.) (55)	Incongruent (S.D.) (32)	t
Condom use	6.38 (2.60)	3.62 (2.24)	5.01•
AIDS awareness	6.55 (2.21)	4.00 (1.90)	5.45•
Designer jeans	5.18 (2.29)	4.88 (2.39)	.60

* Evaluations were based on scale of 1 to 9 where 1=not at all and 9=very much.

• Significant at .001 level.

TABLE 4.

Percent[a] Frequency of Unique Attributes Associated with Madonna by Celebrity-Message Congruence

Attributes n=	Congruent (155) %	Incongruent (90) %
Talent/Artist	21.9	16.7
Daring/Outspoken	18.7	6.7
Slut	18.7	28.9
Smart & Rich	11.0	11.1
Controversial	9.0	10.0
Sexy	7.1	8.9
Attractive	5.2	6.7
Powerful	3.2	1.1
Liberal	1.9	1.0
Attention seeker	1.9	1.1
Wild/Crazy	1.3	1.1
Obnoxious	0.0	6.7

[a] Percentages sum to 100%. They are ranked by responses in the congruent group. The total number of attributes mentioned comprise the base for each group.

APPENDIX A: TEXT FOR VIDEO MESSAGE

MADONNA: Many people think you can tell someone has AIDS just by looking at them.

But they're wrong. A person can have AIDS for a long time without showing any symptoms.

So protect yourself.

Not having sex is one way to avoid AIDS.

Staying away from people who shoot drugs is another.

If you do have sex, use a condom. It may the most important thing you do.

Because what you see may not be what you get.

Help protect yourself against AIDS.

APPENDIX B: CONTENT ANALYSIS CATEGORIES

CELEBRITY ATTRIBUTES

1. SEXY -- SEXY, EROTIC, SEX, RISQUE, SENSUAL, SEX SYMBOL, EROTICA, PUBLIC SEXUAL SYMBOL, SEXY SYMBOL.

2. SLUT -- SLUT, SEXUAL, SLEAZY, PROMISCUOUS, WHORE, CHEAP, DISGUSTING, SLUTTY, KINKY, LIKE A VIRGIN (NOT), PROSTITUTE, TRAMP, TRASHY, DEGRADING, VULGAR, GROSS, OVERSEXED, FLIRTATIOUS, SEXUALLY ACTIVE, NO MORALS, HOOKER LIKE, EXHIBITIONIST, PIG, PORNOGRAPHIC, LOOSE, LESBIAN, LEWD, BISEXUAL.

3. CONTROVERSIAL -- CONTROVERSIAL, OUTRAGEOUS, ECCENTRIC, OUTLANDISH, REBELLIOUS, DIFFERENT, UNINHIBITED, SERIOUS, EXTREMIST, UNPREDICTABLE, ACTIVE, DANGEROUS.

4. TALENTED/ARTIST -- TALENTED, SINGER, ENTERTAINING, CONFIDENT, DANCE, ENTERTAINER, ENTERTAINING, PERFORMER, FAMOUS, POPULAR, ADMIRABLE, MUSICAL, MUSICIAN, DANCER, POP STAR, WELL KNOWN FIGURE, KNOWN FOR MANY THINGS, ACTRESS, BAD ACTRESS, CELEBRITY, WELL KNOWN, FAMOUS, POPULAR, ADMIRED.

5. DARING & OUTSPOKEN -- BOLD, DARING, PROVOCATIVE, GUTSY, ARTICULATE, INDEPENDENT, INDIVIDUALISTIC, UNIQUE, EXPERIMENTAL, OUTGOING, UNAFRAID, RISK TAKER, SELF ABSORBED, CONCERNED, UP FRONT, SPONTANEOUS, SHOW OFF, PERSUASIVE, EXCITING, ORIGINAL.

6. SMART & RICH -- RICH, REALISTIC, WEALTHY, BUSINESS WOMAN, SUCCESSFUL, SMART, GOOD BUSINESSWOMAN, GOAL ORIENTED, AMBITIOUS, CHANGEABLE, MONEY HUNGRY, EXPLOITER, MONEY, AGILE, GOOD BUSINESS SENSE, BILLIONAIRE, SELF INTERESTED, UNCANDID.

7. ATTRACTIVE -- ATTRACTIVE, BEAUTIFUL, PRETTY, DELICIOUS, PALE.

8. POWERFUL -- STRONG, AGGRESSIVE, CHARISMATIC, SELF ASSURED, ENERGETIC, DETERMINED.

9. LIBERAL -- LIBERAL, EASY, RELAXED.

10. OBNOXIOUS -- OBNOXIOUS, ANNOYING, BITCH, REPULSIVE, SLIMY.

11. ATTENTION SEEKER -- ATTENTION SEEKER, ATTENTION GETTING, ATTENTION GETTER, ATTRACT ATTENTION.

12. CRAZY -- CRAZY, NOTORIOUS.

APPENDIX C: STANDARDIZED PRINCIPAL COMPONENTS

ATTRIBUTES ASSOCIATED WITH MADONNA AND MESSAGE EXPOSURE
for (Figure 1)

Standardized loadings: First Three Coordinates

TREATMENT	0.81	-0.56	0.17
CONTROL	0.73	0.67	-0.14
SLUT	0.73	-0.30	0.62
TALENTED	0.94	0.31	-0.12
DARING&OUTSPOKEN	0.91	0.03	-0.41
SEXY	0.91	-0.40	0.04
CONTROVERSIAL	0.84	0.20	-0.50
SMART&RICH	0.63	0.78	-0.09
ATTRACTIVE	0.50	-0.55	-0.67
POWERFUL	0.59	0.81	0.09
ATTENTIONSEEKING	0.56	-0.12	0.82
CRAZY	0.35	-0.70	-0.62
OBNOXIOUS	0.42	-0.02	0.91
LIBERAL	0.98	-0.17	-0.07

ATTRIBUTES ASSOCIATED WITH MADONNA AND SOURCE-MESSAGE CONGRUENCE
for (Figure 2)

Standardized loadings: First Three Coordinates

MATCH	0.88	-0.47	-0.05
SLUT	0.84	0.53	-0.11
NOMATCH	0.68	0.73	0.01
TALENTED	0.96	-0.13	-0.23
DARING&OUTSPOKEN	0.79	-0.62	-0.04
SEXY	0.86	0.33	0.39
CONTROVERSIAL	0.97	-0.25	-0.08
SMART&RICH	0.88	0.09	-0.47
ATTRACTIVE	0.46	-0.17	0.87
POWERFUL	0.51	-0.46	-0.73
ATTENTIONSEEKING	0.55	-0.36	-0.75
CRAZY	0.33	-0.16	0.93
OBNOXIOUS	0.32	0.94	-0.11
LIBERAL	0.85	-0.12	0.51

ATTRIBUTES ASSOCIATED WITH MADONNA, MESSAGE EXPOSURE AND SOURCE-MESSAGE CONGRUENCE for (Figure 3)

Standardized loadings: First Three Coordinates

MATCH	0.88	0.25	-0.41
TREATMENT	0.82	-0.55	-0.17
CONTROL	0.75	0.61	0.24
SLUT	0.81	-0.48	0.33
NOMATCH	0.70	-0.32	0.64
TALENTED	0.95	0.31	0.03
DARING&OUTSPOKEN	0.78	0.23	-0.59
SEXY	0.88	-0.47	0.09
CONTROVERSIAL	0.96	0.26	-0.14
SMART&RICH	0.64	0.66	0.40
ATTRACTIVE	0.59	-0.50	-0.63
POWERFUL	0.54	0.83	-0.11
ATTENTIONSEEKING	0.84	-0.01	-0.54
OBNOXIOUS	0.33	-0.34	0.88
LIBERAL	0.96	-0.07	-0.27
CRAZY	0.37	-0.65	-0.66

Figure 1

Clusters of Attributes Associated with Madonna and Message Exposure

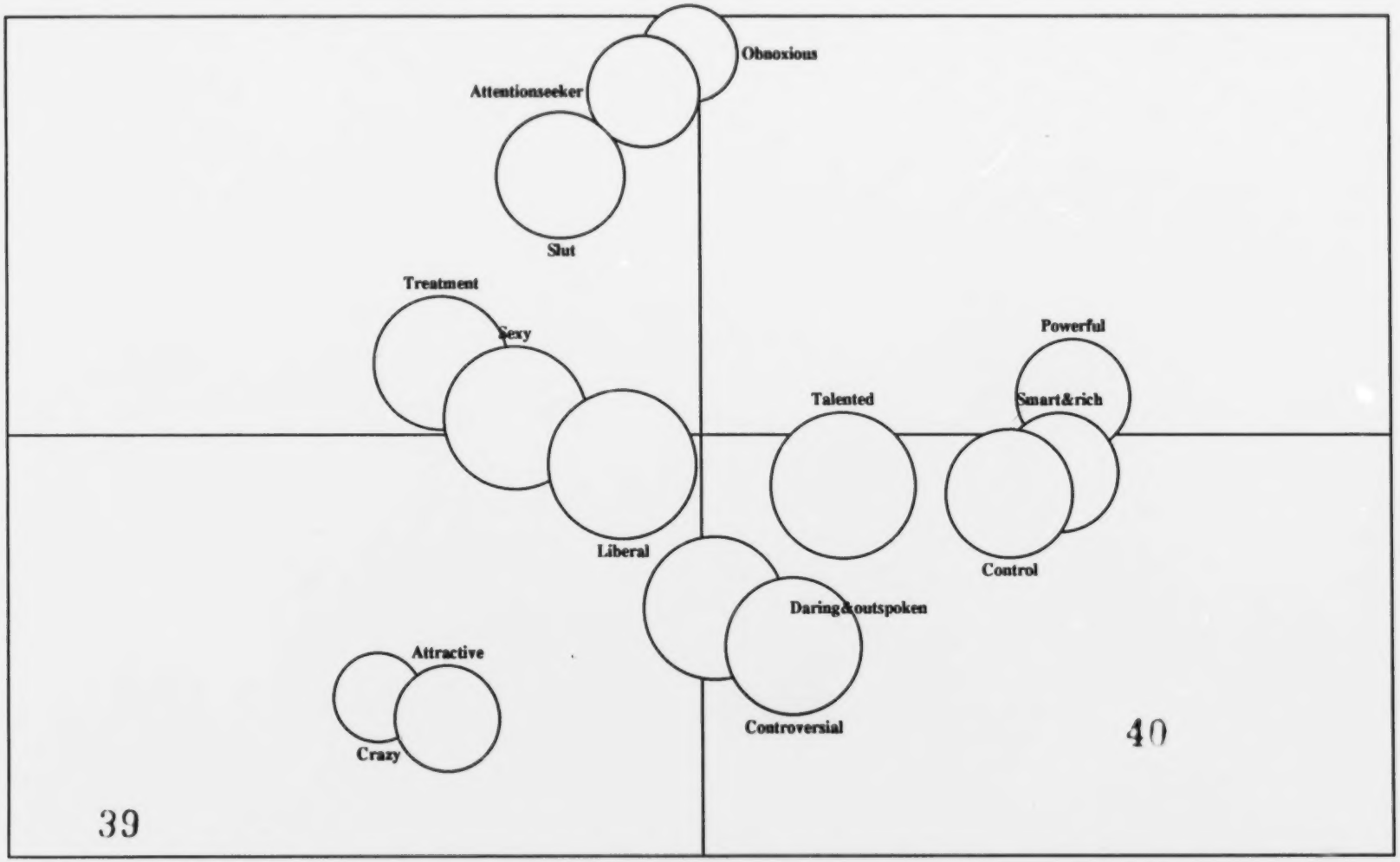

Figure 2

Clusters of Attributes Associated with Madonna and Source-Message Congruence

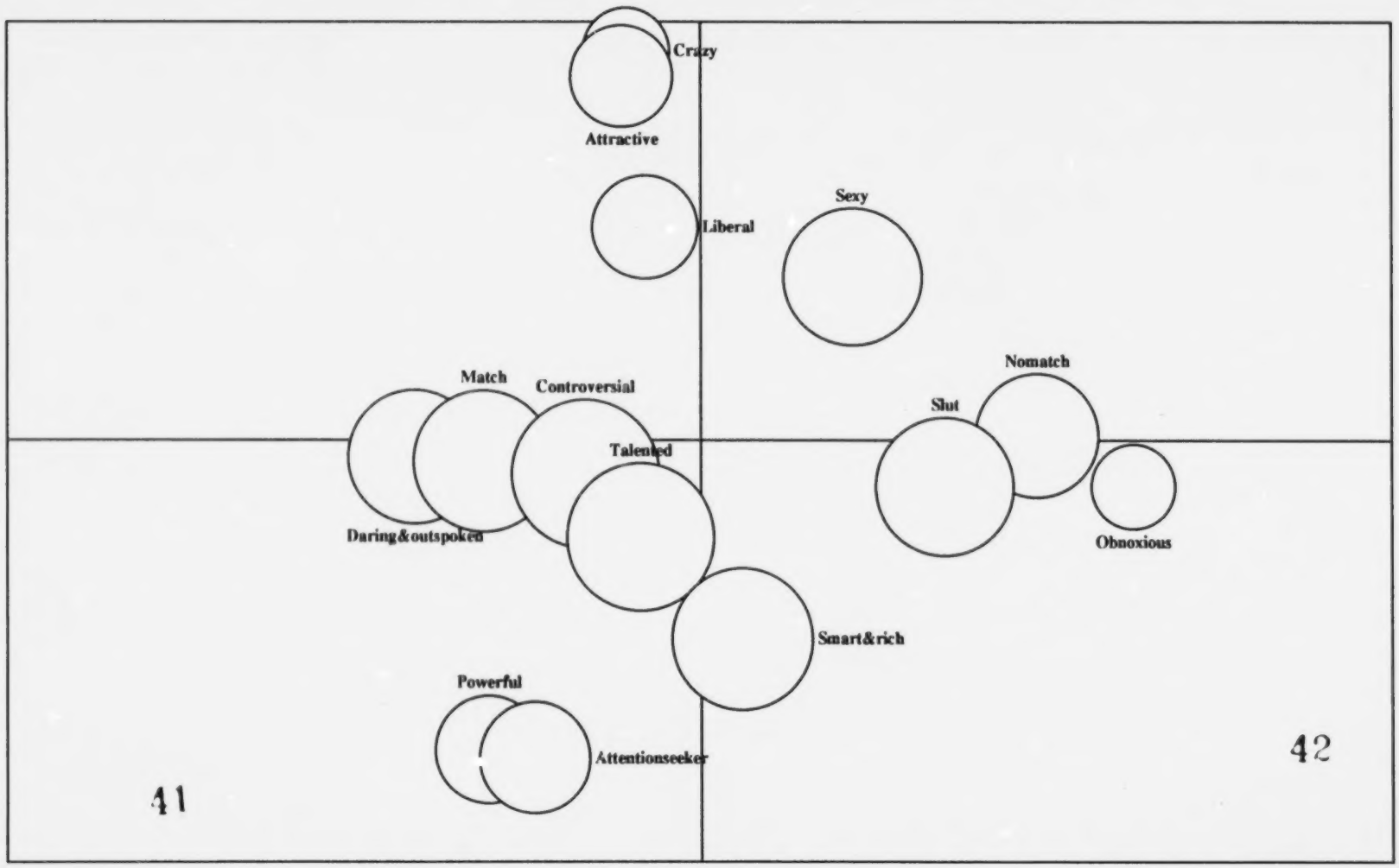

Figure 3

Clusters of Attributes Associated with Madonna, Message Exposure and Source-Message Congruence